

ART. XVIII.—*Note on a New Variety of Peripatus novæ-zealandiæ, Hutton.*

By ARTHUR DENDY, D.Sc., Professor of Biology in the Canterbury College, University of New Zealand.

[Read before the Philosophical Institute of Canterbury, 5th September, 1894.]

THROUGH the kindness of Mr. H. Suter I have recently received three specimens of *Peripatus* from Stratford, in the North Island of New Zealand, a locality from which *Peripatus* has not, so far as I know, been hitherto recorded. The specimens were given to me in spirits of wine, in an admirable state of preservation, having evidently been killed by drowning. They are of remarkably large size, one in particular measuring $2\frac{1}{4}$ in. long in its present state (exclusive of the antennæ), and being broad in proportion.

Their most remarkable peculiarity, however, lies in the fact that they all possess sixteen pairs of claw-bearing legs, instead of the usual fifteen. This is a very remarkable fact, for no Australasian species of *Peripatus* has yet been found to vary in the number of its appendages, although many, especially of *P. novæ-zealandiæ*, have been examined. Sedgwick says, in his monograph of the genus, "The number of legs are constant in all specimens" in the Australasian species. He further gives this number as fifteen pairs. I have already shown, however, that a Victorian species, which I have described under the name of *P. insignis*, has only fourteen pairs, and now we have a variety of the New Zealand species with sixteen. Hence the exact number of the legs can no longer be regarded as a distinguishing character of the Australasian species.

Through the kindness of Captain Hutton and other friends, I have been enabled to examine a considerable number of specimens of the ordinary New Zealand form, with fifteen pairs of legs, coming both from the North and the South Island. I have also carefully dissected, and examined the external characters, including the jaws, of the new variety, and can detect no point of difference except in the large size and the number of legs. The general colour of the three specimens is dull indigo-green, varied with more or fewer orange-coloured papillæ. It is interesting to note that, in spite of the increased number of legs, the genital aperture is still situated between those of the last pair, and the special nephridial apertures are still on the fourth and fifth legs; hence, one is inclined to suppose that the new pair of legs has been intercalated somewhere between the fifth and the fifteenth of the ordinary form.

I had hoped to obtain some evidence as to the time of the appearance of the extra legs from the examination of embryos, but, although both the specimens which I dissected were females, I could find no embryos in a sufficiently advanced state of development to afford the required information.

Had it not been for the well-known variability of certain neotropical species in the number of their legs I should have been inclined to regard the three specimens from Stratford as specifically distinct. Under the circumstances, however, it seems best to regard them as belonging to a local variety, and I propose for this variety the name *Peripatus novæ-zealandiæ*, var. *suteri*.

ART. XIX.—Notes on a New Zealand Land Nemertine.

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THE nemertines form, as is well known, a typically marine group of animals, being abundant and widely distributed in shallow seas. Very few species seem to have deserted their marine habitat in favour of a terrestrial one, so that land nemertines are exceedingly rare. Up to the present time, indeed, only five species have been described—viz., *Tetrastemma agricola*, discovered on the "Challenger" Expedition, and described by Dr. Von Willemoes-Suhm; *Tetrastemma rodericanum*, discovered at the Island of Rodriguez by the Transit of Venus Expedition, and described by Mr. Gulliver; *Geonemertes palaensis*, found by Professor Semper in the Pelew Islands; *Geonemertes chalicophora*, found by Professor Von Graff in gardens in Germany, and probably introduced there by human agency; and lastly, *Geonemertes australiensis*, discovered by myself in Victoria, and described with anatomical details and illustrations in the "Proceedings of the Royal Society of Victoria" for 1891.

Like the land planarians, to which they are in some measure related, the land nemertines belong to the cryptozoic fauna, being found under fallen timber, stones, &c., and probably only venturing from their hiding-places at night or in very wet weather in search of prey. They are small, slimy worms, closely resembling land planarians at first sight, but readily distinguished by the sudden emission of a long, white proboscis from the anterior extremity when the animal is irritated.